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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/654,660	09/05/2000	Stephen R. Carter	6647-17	8081
45842	7590	02/10/2006		
MARGER JOHNSON & MCCOLLOM, P.C. - NOVELL 1030 SW MORRISON STREET PORTLAND, OR 97205			EXAMINER LEZAK, ARRIENNE M	
			ART UNIT	PAPER NUMBER
			2143	

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/654,660	Applicant(s) CARTER ET AL.	
	Examiner Arrienne M. Lezak	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-11,13-16 and 21-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-11,13-16 and 21-32 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Examiner notes that Claims 1, 7 & 13 have been amended, and no Claims have been cancelled or added. All claims not explicitly addressed herein are found to be addressed within the prior Office Action dated 28 July 2005 as reiterated herein below.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7-11, 13-16 & 21-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,363,378 to Conklin in view of US Patent 5,390,281 to Luciw in view of US Patent 6,078,953 to Vaid in view of US Patent US 6,513,031 B1 to Fries.

3. Regarding Newly Amended Claims 1, 7 & 13, Conklin discloses a computer-implemented method for enforcing policy over a computer network, the method comprising:

- selecting a dictionary, the dictionary including a plurality of concepts organized as a directed set, (Conklin – Fig. 3, item 200; Col. 10, lines 31-51; & Col. 12, lines 1-45), exactly one concept identified as a maximal

- element, and a plurality of chains connecting the maximal element to each concept in the directed set, (Conklin - Col. 7, lines 39-50);
- selecting a set of intentional stance basis chains to form a basis, (Conklin - Fig. 6 & Col. 12, lines 1-18), (Examiner notes that "places of interest" is a subcategory under the category "tourism", "is a" being the basis, wherein each chain contains the basis "is a" as a categorical relation to it's parent, thus forming an intentional stance basis chain);
 - selecting at least one concept in the dictionary, (Conklin – Fig. 5, items 410-490);
 - creating a state vector in a topological vector space for each selected concept, (Conklin – Col. 4, lines 39-67 & Col. 5, lines 1-15), (Please note the document theme vector), wherein each state vector includes at least one measure of how concretely the concept is represented in each chain in the basis, (Conklin – Col. 7, lines 62-67; Col. 8; & Col. 9, lines 1-26), (Examiner notes that each theme/node vector, interpreted as state vectors, contain a parent and descendant weight identifying how concretely the concept is represented in each chain in the basis).
4. Conklin does not disclose: assembling the first subset of the state vectors in the topological vector space into a template. Luciw teaches assembling information into a template and associating an action with the template, (Luciw – Col. 8, lines 3-55 & Col. 11, lines 10-32). Therefore, at the time of invention by Applicant, it would have been obvious to one of ordinary skill in the art to modify Conklin with Luciw by placing the

state vectors into a template and associating an action with the template. The motivation for doing so would have been to generate templates, which contain directed information slots to perform a task upon meeting satisfying conditions, (Luciw – Col. 7, lines 55-63 & Col. 11, lines 21-32).

5. Conklin in view of Luciw does not associate with the template the specific “action” limitations of the topological vector space including at least one vector not in the template; assigning a policy to the computer network; monitoring a content stream on the computer network; and enforcing the policy when the impact summary is within a threshold distance of the template.

6. Vaid discloses a computer-implemented method, medium and apparatus for enforcing policy over a computer network, the method comprising: defining a template; assigning a policy to the computer network; monitoring a content stream on the computer network; and enforcing the policy when the content stream is within a threshold distance of the template, (Col. 16, lines 18-63; Fig. 3; and Fig. 8).

7. Vaid does not specifically disclose a template including a “first subset of vectors in a topological vector space including at least one vector not in the template” and monitoring a content stream “to construct an impact summary including a second set of the vectors in the topological vector space” for enforcing the policy when the impact summary is within a threshold distance of the template.

8. Fries discloses a “system for improving search area selection”, (Col. 1, lines 66-67; Col. 2, lines 1-26; Cols. 11-14; Cols. 16, 17, 21, 22; and Col. 28, lines 29-56) which includes a “support vector machine” and querying using “semantic bits”, (Col. 20, lines

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58-67 & Col. 21, lines 1-59). It would have been obvious to one of ordinary skill in the art at the time of invention by Applicant to combine the teachings of Vaid and Fries.

The motivation to combine Vaid and Fries lies in the fact that Vaid teaches a traffic management tool and Fries teaches an improvement/advantage on that tool in the form of a search optimization, (Fries – Col. 1, lines 61-63). Additionally, motivation to combine Vaid and Fries with Conklin and Luciw again would have been to generate templates, which contain directed information slots to perform a task (which task obviously could be the specifically enumerated “action” of the topological vector space including at least one vector not in the template; assigning a policy to the computer network; monitoring a content stream on the computer network; and enforcing the policy when the impact summary is within a threshold distance of the template), upon meeting satisfying conditions, (Luciw – Col. 7, lines 55-63 & Col. 11, lines 21-32).

9. Additionally, Examiner finds that bandwidth limits, (Col. 16, lines 53-55), as incorporated into the template of Vaid in fact reads upon “the content is compared to a set of vectors, (which form a template), to determine the distance, (threshold), between the content and the template”, as defined by Applicant, (2.17.04 Amendment: p. 7, lines 8-12). Further, the notion of being “greater than” or “less than” reads on a mathematical formula, (Amendment: p. 7, lines 8-12). It would have been obvious to a person having ordinary skill in the art at the time of invention by Applicant to define a template by a set of vectors within a network wherein policies are used to improve quality of service, as noted within Vaid, (Col. 16, lines 50-63). The motivation to combine is suggested by Vaid, which teaches the application of bandwidth-based functions and modifications,

alternatives and variations thereof. Thus, Newly Amended Claims 1, 7 and 13 are found to be unpatentable over the combined teachings of Conklin, Luciw, Vaid and Fries.

10. Regarding Claims 2 & 8, Conklin in view of Luciw, Vaid & Fries is relied upon for those teachings disclosed herein. Vaid further discloses a computer-implemented method, medium and apparatus wherein assigning a policy includes assigning a policy to limit bandwidth on the computer network for content in the content stream within the threshold distance of the template, (Col. 4, lines 29-32 and Col. 6, lines 39-63). Thus, Claims 2 & 8 are found to be unpatentable over the combined teachings of Conklin, Luciw, Vaid and Fries.

11. Regarding Claims 3 & 9, Conklin in view of Luciw, Vaid & Fries is relied upon for those teachings disclosed herein. Vaid further discloses a computer-implemented method, medium and apparatus wherein assigning a policy includes assigning a policy to limit access to a document on the computer network within the threshold distance of the template, (Col. 7, lines 30-50 – incl. Table 2; Col. 8, lines 1-34). Thus, Claims 3 & 9 are found to be unpatentable over the combined teachings of Conklin, Luciw, Vaid and Fries.

12. Regarding Claims 4, 10, 14 & 15, Conklin in view of Luciw, Vaid & Fries is relied upon for those teachings disclosed herein. Vaid further discloses a computer-implemented method, medium and apparatus wherein monitoring a content stream includes monitoring metadata of the content stream, (Col. 17, lines 8-50; Col. 19, lines

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54-55; and Col. 20, lines 1-2). Thus, Claims 4, 10, 14 & 15 are found to be unpatentable over the combined teachings of Conklin, Luciw, Vaid and Fries.

13. Regarding Newly Amended Claims 5, 11 & 16, Conklin in view of Luciw, Vaid & Fries is relied upon for those teachings disclosed herein. Examiner notes that all the claim limitations of newly amended claims 5, 11 & 16 are already present within Independent Claims 1, 7 & 13, and as such are rejected under the same grounds and reasoning. Additionally, Examiner notes that a predictive congestion control of high-speed wide area networks comprising extrapolation and summary methods was well-known in the art, (please see Ramamurthy below), wherein it would have been obvious within a system which discloses the use of congestion, utilization and performance degradation reports for purposes of day-to-day troubleshooting and justification and validation of policy decisions, (Vaid - Col. 18, lines 46-64), to conform such reports to include extrapolation and impact summary functionalities, as they would further serve to necessitate evaluation of the affected service. Thus, Newly Amended Claims 5, 11 & 16 are found to be unpatentable over the combined teachings of Conklin, Luciw, Vaid and Fries.

14. Regarding Claims 21-26, Conklin in view of Luciw, Vaid & Fries is relied upon for those teachings disclosed herein. Fries further discloses a method, program and apparatus wherein enforcing the policy includes: measuring a distance between the impact summary and the template (using a Hausdorff distance function – per pending Claims 22, 24 & 26); and enforcing the policy if the distance is less than the threshold distance, (Col. 20, lines 58-67, Col. 21; and Col. 22, lines 1-24), (Examiner notes that as

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Fries teaches the use of a distance measurement, the use of the Hausdorff distance function would have been obvious). Thus, Claims 21-26 are found to be unpatentable over the combined teachings of Conklin, Luciw, Vaid and Fries.

15. Regarding Claims 27-32, Conklin in view of Luciw, Vaid & Fries is relied upon for those teachings disclosed herein. Fries further discloses a support vector machine which generates a goal vector space by converting each set of features into a vector in the goal vector space, which goal vector space is then divided by a set of goal surfaces based on the goals identified for each training vector, (col. 20, lines 58-67; Col. 21; & Col. 22, lines 1-24). Examiner finds that as "each set of features" is converted into a vector in the goal space, obviously more than one vector is generated per each goal vector space. Thus, Claims 27-32 are found to be unpatentable over the combined teachings of Conklin, Luciw, Vaid and Fries.

Double Patenting

16. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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17. Claims 1-5, 7-11, 13-16 & 21-32 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-26 of copending Application No. 09/653,713 in view of:

US Patent 6,363,378 to Conklin;

US Patent 5,390,281 to Luciw;

US Patent 6,078,953 to Vaid; and

US Patent US 6,513,031 B1 to Fries.

18. This is a provisional obviousness-type double patenting rejection. Examiner notes that with the exception of obvious differences, Independent Claims 1, 7 & 13 from pending Application 09/654,660 are the same as Independent Claims 1, 6, 14, 17, 23 & 24 of pending Application 09/653,713. Such differences include but are not limited to, the particular claiming of an action, ('660), as opposed to the claiming of an action generally, ('713), which are all obviously the same in view of the prior art.

19. Examiner further rejects all dependant Claims as being literally identical or identical in nature, meaning and intent so as to be obviously identical.

20. Claims 1-5, 7-11, 13-16 & 21-32 are further provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-16 & 20-25 of copending Application No. 09/512,963 in view of:

US Patent 6,363,378 to Conklin;

US Patent 5,390,281 to Luciw;

US Patent 6,078,953 to Vaid; and

US Patent US 6,513,031 B1 to Fries.

21. This is a provisional obviousness-type double patenting rejection. Examiner notes that with the exception of obvious differences, Independent Claims 1, 7 & 13 from pending Application 09/654,660 are the same as Independent Claims 1, 11, 12, 15, 16 & 20 of pending Application 09/512,963. Such differences include but are not limited to, the particular claiming of an action, ('660), as opposed to the claiming of an action generally, ('963), which are all obviously the same in view of the prior art.

22. Examiner further rejects all dependant Claims as being literally identical or identical in nature, meaning and intent so as to be obviously identical.

Response to Arguments

23. Applicant's arguments filed 28 November 2005, have been fully considered but they are not persuasive. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections. Examiner respectfully disagrees with Applicant's argument pertaining to semantic interpretations, noting that Fries does indeed disclose a goal vector defined by multiple vectors. Moreover, Fries discloses a comparison means by which a query's goal vector is measured against each of the goal surfaces in the goal space.

24. Regarding Applicant's argument that Conklin does not teach a directed set with exactly one maximal element, Examiner respectfully disagrees noting Applicant's own

words on page 10 of the Amendment dated 28 November 2005, wherein Applicant notes, that "Conklin can be said to be teaching a directed graph. A directed graph allows for there to be more than one directed path connecting two nodes. While it is possible for a directed graph to have one root node, it is not a requirement." Applicant goes on to note "Conklin's example in Fig. 6 shows no root node or maximal element in the graph. At best, each individual tree has a maximal element." Examiner finds that since Conklin clearly teaches a directed graph, which directed graph by Applicant's own admission could obviously have one root node/maximal element, Conklin clearly and obviously teaches a directed set with exactly one maximal element.

25. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a maximal element from which paths lead to all other elements) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Specifically, Applicant argues that though Conklin teaches that there can be more than one unique path between nodes, it still fails to show a maximal element, from which paths lead to all other elements, and Examiner respectfully disagrees noting that Applicant's claims do not enumerate a connection to all other concepts/elements. Moreover, as noted above, Applicant has admitted that it is possible for a directed graph to have one root node/maximal element, wherein connection of that one root node/maximal element to all other elements/concepts would have been obvious. Finally, Examiner notes that Applicant

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incorporates open claim language, specifically; Applicant uses the word “comprising”, which word is not limiting in scope and therefore the claim as written, may be read to apply to the selection of multiple dictionaries with multiple maximal elements.

26. Regarding Applicant’s argument that Conklin does not teach the measuring of distances between vectors, Examiner respectfully disagrees, noting Conklin specifically teaches a proximity determination, (Conklin – Col. 3, lines 2-24), which determination in combination with the teachings of the other cited references, clearly and obviously reads upon Applicant’s claim language as written.

27. In response to applicant's argument that though the general idea behind the combined teachings is quasi-similar, the actual use is quite distinct, Examiner notes that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

28. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Examiner finds that the motivation to combine the references was proper, as noted herein above.

29. In response to Applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Examiner notes further that again, Applicant has not argued the combined teachings of Conklin, Luciw, Vaid and Fries as they pertain to the rejected claims. Applicant's remarks in the Amendment dated 28 November 2005 clearly argue the references individually and at no point indicate how the combined teachings do not encompass Applicant's claimed invention. Moreover, Examiner notes that the Ramamurthy reference was provided for the sole purpose of exemplifying the fact that extrapolation was well known in the art at the time of invention by Applicant.

30. Thus, as Examiner has completely addressed Applicant's amendment, and finding Applicant's arguments do not show how Applicant's amendment avoids such references or objections, Examiner hereby maintains the rejection of all previously stated claims in addition to newly amended claims, as noted herein above.

31. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then

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the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US Patent 5,276,677 to Ramamurthy.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arrienne M. Lezak whose telephone number is (571)-272-3916. The examiner can normally be reached on M-F 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571)-272-3923. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Arrienne M. Lezak
Examiner
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A handwritten signature in black ink, appearing to read "Jeffrey PWU".

JEFFREY PWU
PRIMARY EXAMINER